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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/456,793

12/08/1999

Christopher L. Knauf

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05/31/2006

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EXAMINER

NGUYEN, MAIKHANH

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/456,793

Applicant(s)

KNAUFT ET AL.

Examiner

Maikhanh Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***DETAILED ACTION***

1. This action is responsive to communications: RCE filed 03/17/2006 to the original application filed 12/08/1999.
2. Claims 1-27 are currently pending in this application. Claims 1, 12, and 25 have been amended. Claims 1, 12, 19, and 25 are independent claims.

***Request Continuation for Examination***

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/17/2006 has been entered.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person*

*having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

*(b) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).*

5. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Castelli et al.** (U.S. 6,122,628 – filed 10/1997) in view of **Liaguno et al.** (U.S. 5,729,741 – filed 04/1995).

**As to claim 12:**

Castelli teaches a method of providing index information (*e. g., indexing*) for secure graphical or audio objects (*e. g., audio, video, and image*) [*see the Abstract and the discussion beginning at col.6, line 65*], the method comprising:

- reading index information that is associated with a secure graphical or audio object, wherein the index information is structured for use in an index database of a search engine system, and wherein the search engine systems do not have full access to the secure graphical or audio object, and wherein search engine do not have access to the index information associated with the secure graphical or audio object (*e.g., queries needing multidimensional, e.g., spatial indexing (including range queries and nearest neighbor queries) will invoke the multidimensional indexing engine (107). The multidimensional indexing engine (107) (described with reference to FIGS. 8-11) is responsible for retrieving those vectors or*

*records which satisfy the constraints specified by the query based on one or more compact multidimensional indexes (108) and clustering (111) and dimensionality reduction information (112) generated by the index generation logic (110)...*

*Multimedia data is another example of data that benefits from spatial indexing.*

*Multimedia data such as audio, video and images can be stored separately from the meta-data used for indexing) [see the discussion beginning at col.6, line 21];*

*and*

- *transmitting the index information to the search engine system, wherein the index information is for use in the index database of the search engine system (e.g., the index is generated without recursive application of the clustering and singular value decomposition. An exact search is the process of retrieving a record or records that exactly match a search query, such as a search template. As depicted, in step 802 a query including specified data such as a search template (801) is received by the multidimensional index engine (107) (also called cluster search logic). In step 802, the clustering information (604) produced in step 601 of FIG. 6, is used to identify the cluster to which the search template belongs. In step 803, the dimensionality reduction information (607) produced in step 606 of FIG. 6, is used to project the input template onto the subspace associated with the cluster identified in step 802, and produce a projected template (804)...Note that the simplest search mechanism within each cluster is to conduct a linear scan (or linear search) if no spatial indexing structure can be utilized. On most occasions, spatial indexing structures such as R-trees can offer better efficiency (as*

*compared to linear scan) when the dimension of the cluster is relatively small (smaller than 10 in most cases) [see the discussion beginning at col.13, line 8];*

Castelli, however, does not specifically teach “*obfuscating at least a portion of the index information so that the intelligibility of the index information is reduced.*”

Liaguno teaches obfuscating at least a portion of the index information so that the intelligibility of the index information is reduced (*e.g., see the discussion beginning at col.13, line 52*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature from Liaguno in the system of Castelli because it would have provided the capability for facilitating rapid retrieval of any type of data, regardless of its original format (e.g. text, picture, text-picture combination, video, audio) and regardless of the capture medium or source from which it is imported into the system.

**As to claim 13:**

Refer to the discussion of claim 12 above for rejection the use of “*a portion of the index obfuscated information.*”

**As to claim 14:**

Castelli teaches customizing, is based at least in part upon the contents of the index characteristics of one or more the search engine systems (*e.g., see the discussion beginning at col.6, line 65*).

**As to claim 15:**

Castelli teaches a HyperText Markup Language file (*e.g., HTML; see the discussion beginning at col.7, line 7*).

**As to claim 16:**

Castelli teaches a bitmap image (*e.g., see the discussion beginning at col.7, line 24*).

**As to claim 17:**

Castelli teaches the secure graphical object is a multimedia presentation (*e.g., see the discussion beginning at col.6, line 65*).

**As to claim 18:**

Castelli teaches the graphical object is a stream media file (*e.g., see the discussion beginning at col.6, line 65*).

**As to claim 1:**

The rejection of claim 12 above is incorporated herein in full. Additionally, Castelli teaches converting at least a portion of a secure audiovisual object into index information

*(e.g., Multimedia data is another example of data that benefits from spatial indexing.*

*Multimedia data such as audio, video and images can be stored separately from the*

*meta-data used for indexing) [see the discussion beginning at col.6, line 65].*

**As to claims 2 and 3-5:**

Note the discussions of claims 13 and 20-22, respectively, for rejections.

**As to claim 6:**

Castelli teaches music *[see the discussion beginning at col.6, line 65].*

**As to claim 7:**

Castelli teaches identifying one or more words in the lyrics of the music *[see the discussion beginning at col.6, line 65].*

**As to claim 8:**

Note the discussion of claim 17 above for rejection.

**As to claim 9:**

Castelli teaches reading close captioned information that is associated with the audiovisual object *[see the discussion beginning at col.3, line 36].*

**As to claim 10:**



Castelli teaches a streaming media file *[see the discussion beginning at col.6, line 65]*.

**As to claim 11:**

Note the discussion of claim 9 above for rejection.

**As to claim 25:**

The rejection of claim 12 above is incorporated herein in full. Additionally, Castelli teaches dynamically generating an electronic document based at least in part upon the contents of the index information (*e.g., Automatic indexing of images, where numerical descriptors of color and texture are stored. During a search, these properties are used to find similar images. The combination of visual queries with text queries or queries on parameters such as a date. Similarly, indexes can be generated by first creating a representation of the database to be indexed as a set of vectors, where each vector corresponds to a row in the database and the elements of each vector correspond to the values, for the particular row, contained in the columns for which an index must be generated. Creating a representation of the database as a set of vectors is well known in the art. The representation can be created by, but is not limited to: creating for each row of the database an array of length equal to the dimensionality of the index to be generated; and copying to the elements of the array, the values contained in the columns, of the corresponding row, for which the index must be generated*) *[see the discussion beginning at col.7, line 24]*.

**As to claims 26 and 27:**

Note the discussions of claims 14 and 15, respectively, for rejections.

**As to claim 19:**

Note the discussion of claim 25 above. Additionally, Castelli teaches a web server connected to a network (*e.g., see fig. 1 and the accompanying text beginning at col. 6, line 8*), said web server operable to manage a content owner's secure graphical or audio objects including granting and denying access to secure content requesters, wherein search engine systems are denied access to said objects (*e.g., see the discussion beginning at col. 6, line 21*).

**As to claims 20 and 21:**

Note the discussions of claims 14 and 15, respectively, for rejections.

**As to claims 22-24:**

Note the discussions of claims 5, 8, and 10, respectively, for rejections.

***Response to Arguments***

6. Applicants' arguments filed 03/17/2006 have been fully considered but are moot in view of the new ground(s) rejection.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Adams et al.	U.S. Pat. No. 5,483,651	Issued: Jan. 9, 1996
Wang Baldonado	U.S. Pat. No. 6,732,109	Issued: Mar. 9, 2004

***Contact information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached at (571) 272-4136.
- The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2176

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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